CHAPTER 4 LAND USE AND AIR QUALITY (R645-301-400)

TABLE OF CONTENTS

CHAPTER 4: LAND USE AND AIR QUALITY

SECTION	DESCRIPTION	PAGE
4.10	Regional Land Use	4-1
4.11	Premining	4-1
4.11.11	Surface Land Status/Mine Plan Area	4-2
	Ownership	4-2
	Surface Managing Authorities	4-3
	Affect of Operation on Land Use	4-3
4.11.14	Cultural and Historic Resource Information	14-4
4.11.143	Effects of Mining on Historical Resources.	4-6
4.11.2	Previous Mining	4-6
4.12	Reclamation Plan	4-7
4.12.1	Postmining Land Use Plan	4-7
4.12.2	Landowner Or Surface Manager Comments	4-7
4.13	Performance Standards	4-7
4.13.1	Postmining Land Use	4-7
4.13.3	Criteria for Alternative Postmining Land Use	4-7
4.20	Air Quality	4-7

Chapter 4 (R645-301-400)

LAND USE

4.10 Regional Land Use

Under United States Forest Service jurisdiction to be managed as a multiple use forest area.

Land Use In Mine Plan Area. Prior to 1939, the permit area was used for dispersed, non-developed recreation, grazing by native big game species and habitat for small game and non-game animals. From 1939 until 1955, the area was mined by traditional room and pillar methods. Approximately 35,000 tons were removed from the Hiawatha Seam. Since termination of mining, the land has reverted to its original uses. Cattle are moved through the canyon to grazing areas at higher elevations. Some grazing occurs in the riparian areas at these times, but the canyon slopes are too steep to be suitable for regular grazing. The area is also unsuitable for logging.

After mining operations cease, the area will be restored to its approximate original contours, it will most likely be too steep for grazing by other than native game and non-game species. The access road will be left in place, pursuant to the wishes of the USFS (surface landowner).

4.11 Premining

The Premining use of the land was for dispersed non-developed recreation, native wildlife habitats and dispersed cattle grazing. The wildlife habitats within the mine area are described in Appendix 3.2 and 3.3. The area has been used for a previous mining operation and the previous operation created somewhat level areas to create access to the coal seam and for coal loading operations.

This has made the area somewhat more accessible and in a better condition as far as access goes, however, the previous operation had left a lot of trash and lumber, remains of old cabins, fuel and oil cans in the area which made it less desirable for recreation from an aesthetic point of view. A portion of the existing vegetation was also disturbed and there was no evidence of any revegetative work having ever been done in the area.

After reclamation, the area will be restored to support uses it was capable of supporting prior to mining. Vegetation will be restored to provide habitat and a food source for wildlife. It is expected that the cattle grazing will continue after reclamation. The access road will remain pursuant to the wishes of the USFS (surface landowners), to support limited (underdeveloped) recreation.

The Manti-La Sal Division of the United States Forest Service has this area shown on their land use map as suitable for dispersed, non-developed recreation, and suitable for limited grazing as the slopes are steep and there is not enough of the necessary vegetation for extensive grazing. It is also classified as unsuitable for logging operations as conifer is only a marginal component of the area.

Dispersed grazing currently occurs in the permit area while cattle are moved through to higher elevation grazing areas. It is expected that this sporadic grazing will continue after mine life. Big game will also graze the post-mine land.

Crandall Canyon is not actually being used as summer range for cattle, but cattle are moved through the canyon to the actual grazing areas at higher elevations. Because the cattle are moved through the canyon, grazing, although undesirable, does occur, without noticeable depletion of vegetation in the riparian zone. The riparian zone, covering a minute portion of the canyon area, allows for some grazing. It is undesirable for the effect it has on riparian vegetation for use by native wildlife. The posture of the canyon lying outside the riparian zone is too steep for grazing by other than native wildlife. Wildlife use will be part of the post-mine land-use for this reason. Cattle will still be moved through the canyon with unavoidable sporadic grazing in the riparian zone, but the cattle should be moved to higher elevations as soon as possible to avoid unnecessary damage to vegetation to the riparian zone. By returning the disturbed areas to its original contours, it will again be too steep for grazing by other than native big game species.

4.11.11 Surface Land Status/Mine Plan Area

Ownership of the surface rights within and contiguous to the mine plan and permit area is shown on Plates 1-1, 5-3 and 4-1. The surface within the lease areas and the contiguous lands, outside of the ARCO fee lands, are administered by the USFS. Also as shown on Plate 1-1 there are no structures within 1000' of the mine permit area.

Ownership

The United States Government under the supervision of the Manti-La Sal National Forest owns most of the surface rights in the immediate area of the permit and mine plan area as shown on Plates 1-1, 5-3 and 4-1.

Swisher Coal Company is now owned by the Atlantic Richfield Company. The properties formerly owned by Swisher are now operated by ARCO as Mountain Coal Company. Mailing address for Mountain

Coal Company is as follows:

Mountain Coal Company P.O. Box 591 Somerset, Colorado 81434

Surface Managing Authorities

United States Department of Agriculture, Forest Service, Intermountain Region.

Utility Corridors and Other Right-Of-Ways

No utility corridors or other rights-of-way exist on the surface or in documentation or court record. There are no surface or subsurface man-made features within or passing over the permit area.

There has been no change in the premining use of the land within 5 years or the permit being filled.

Affect Of Operation On Land-Use

Applicant feels that greater portion of permit area will not be affected by our operation and that premining land-use will be applicable except for disturbed area around portals and access road.

The maximum area of possible subsidence is shown on Plate 5-2 as the area contained within the zero subsidence contours. As explained in Chapters 5 and 7 no adverse effects are expected to occur as a result of the subsidence mechanisms and no mitigation measures are proposed, however in the event subsidence damages or alters such structures as streams, roads etc. Genwal will repair or replace such structures in conjunction with prudent and reasonable environmental designs.

4.11.12

In the Manti-La Sal National Forest Land and Resource Management Plan (LRMP), 1986, the Forest Service has developed certain management objectives for the area.

The permit area includes four separate management units. The management units are as follows and management emphasis for each unit is described.

The bottom of Crandall Canyon is included in the MMA (Leasable Minerals Area) Management Unit where management emphasis is on leasable minerals development. This unit includes the surface facilities for the mine.

The eastern portion of the permit area lies within the GWR (General Big Game Winter Range) Management Unit where management emphasis is on providing general big game winter range.

The north and west areas of the permit area lies within the RNG (Range Forage Production) Management Unit. Management emphasis is on production of forage and cover for domestic livestock and wildlife.

The riparian area along Crandall Creek is included in the RPN (Riparian) Management Unit. RPN areas include the aquatic (including fish) ecosystem, the riparian (characterized by distinct vegetation), and adjacent ecosystems that remain within approximately 100 feet measured horizontally from the edge of all perennial streams and springs, and the shores of lakes and other still water bodies, i.e., from seeps, bogs, and wet meadows. Emphasis is on preservation of the riparian areas and component ecosystem.

The historic use of the land has been for recreation, forestry, wildlife habitat and mining as indicated by previous zoning, historic documentation and visual examination.

4.11.13

Emery County had previously zoned this area as a recreation forestry and mining area. However, as of November 12, 1979, this area has been rezoned to CE-1 which is a critical environment zone. A county zoning of CE-1 does not prohibit mining. Therefore, the area did not have to be rezoned.

4.11.14 Cultural and Historic Resource Information

A Cultural, Historic and Archeological inventory conducted on June 19 and 20, 1980 on all areas to be disturbed in the proposed permit area. No recorded or unrecorded archeological sites were found in the project area. A copy of the report on the archeological inventory is included as a supplement to this chapter as Appendix 4-1.

All of the areas potentially affected by surface disturbing activities (5.7 acres) in Genwal's Crandall Canyon Mine Plan were investigated for cultural resources. No prehistoric remains were located in the mine plan area. A single site, however, near a haul road from the mine was recorded in 1975, by the Forest Service. This site (42EM722), a rock shelter, is some 50 meters in length and contains at least one meter of cultural deposits. Remains include stone tools, pottery, lithic debris, abundant charcoal, bone and pictographs on the cliff face above. Extensive vandalism has taken place; however, undisturbed areas in the shelter still remain. The site is eligible for inclusion to the National Register of Historic Places. Therefore, it needs to be protected.

The major threats to the site appear to be a direct impact from possible road improvement and present ensuing impacts caused by increased vandalism brought about by the improvement of the road. The site was fenced to be a solution to the vandalism problem.

The archeological site at the mouth of Crandall Creek is not threatened by road improvements and the area is fenced as stated in the plan. The initial road development has progressed along Crandall Canyon past site (42EM722) and the applicant has fenced off the designated site accordingly. A detailed report on the Sherman Shelter was completed by the USFS and is included within this chapter as Appendix 4-4.

4.11.141

Cultural and Historic Resource maps are included in Appendix 4-5 and 4-6.

4.11.141.1

There are no public parks in the permit area. The only site of historical significance is a archeological site listed as "The Sherman Shelter 42EM722" and is addressed in Appendix 4-4.

4.11.141.2

No cemeteries exist within the permit area or within any adjacent area subject to potential impacts.

4.11.141.3

No trails or the wild and scenic rivers or study area rivers exist within the permit area or areas of potential impact.

4.11.142

The State historic Preservation Office in a letter dated August 8, 1980, (see Appendix 4-2) has granted cultural resource clearance for the Genwal Crandall Canyon Mine. The Office of Surface Mining will proceed with compliance to the SHPO's findings when the aforementioned requests are addressed. Conditional clearance from OSM was provided by a letter dated April 17, 1981 (see Appendix 4-3). The applicant has followed the recommendations contained in Appendix 4-1, the Archeological Reconnaissance Report, and fenced site 42EM722. A subsidence monitoring plan is included as part of this resubmission in Chapter 5.

4.11.142.1 - 4.11.142.2

No adverse impacts are anticipated and Genwal has taken all action outlined and recommended by OSM and the USFS to safeguard the Sherman Shelter.

4.11.143 Effects Of Mining On Historical Resources

Applicant determines there will be no effects of mining on historical resources. Applicant proposes there will be no impacts of mining on human values, cultural or historical.

4.11.143.2

Field investigations have been conducted in conjunction with the archeological survey.

A map showing the survey area investigated for archeological importance is included as Appendix 4-5.

Although the archeological report mentions a scattering of historic mining remains, they are remains of habitation and human use rather than mining. The remains consist of a rusty automobile body, either a 1939-1940 Ford or Mercury, numerous tin cans and bottles, bedsprings, and piles of wood from old cabins which have been destroyed by vandals. These habitation remains (1939-1955) are of absolutely no historic value and no study will be undertaken to document the worthless remains. A clear map of areas surveyed in relation to areas of potential surface disturbance are included in this permit (Appendix 4-1).

4.11.200 Previous Mining

The mine plan area has been previously mined and the following information is provided.

4.11.210

Type of mining method used: room and pillar method of mining.

4.11.220

Coal seams mined: Hiawatha seam was the only seam mined.

4.11.230

Extent of coal removed: Approximately 35,000 tons as per USGS calculations.

4.11.240

Approximate dates of past mining: November, 1939, to September, 1955, as per USGS records.

4.11.250

The land was historically used for wildlife and domestic grazing.

4.12 Reclamation Plan

4.12.1 Postmining Land Use Plan

In areas where surface disturbances resulted from mining operations, soil reclamation and revegetation will restore the areas to their premining usefulness as range land, wildlife habitat and recreational use. The plans for this reclamation is presented in chapters 2, 3, 5 and 7.

Land uses are solely at the discretion of the surface management agency; USFS. No alternative land uses have been proposed.

4.12.2 Landowner Or Surface Manager Comments

The citations from the Manti LaSal National Forest Land and Resource Management Plan can be considered as comments from the Forest Service for most of the disturbed area. The plan states that the road will be left in place pursuant to the wishes of the Forest Service and the surface landowner. Correspondence from the Forest Service indicating the above and outlining attendant reclamation requirements is included in Appendix 1-2. Letter from State Lands and Arco are also included in Appendix 4-8

4.13 Performance Standards

4.13.1 Postmining Land Use

All disturbed areas will be restored in a timely manner to conditions that are capable of supporting the uses they were capable of supporting before any mining.

4.13.3 Criteria for Alternative Postmining Land Use

No alternative postmining land use is planned or proposed.

4.20 Air Quality

4.21 Coal mining and reclamation operations will be conducted in compliance with the requirements for the Clean Air Act and any other applicable Utah or Federal statutes and regulations containing air quality standards.

4.22

The Applicant has received a new air quality permit covering all planned facilities for the Genwal Canyon Mine with the Utah Bureau of Air Quality. A copy of this Approval Order is presented in Appendix 4-7.

4.23

The Air Quality Approval Order contains the Applicant's air pollution control plan which includes an air quality monitoring program to provide sufficient data in evaluating the effectiveness of the fugitive dust control practices and compliance with federal and Utah air quality standards.

4.24

A fugitive dust control plan is also included in appendix 4-7.

